



Figure 2A

(Map of Mouse IL-17 Like cDNA (SEQ ID NO:3) and Amino Acid  
(SEQ ID NO:4) Sequences with Predicted Signal Peptide

1	ATGTACACGAGGTGTTGCATTCTTGGCAATGATCTGTGGAAACCACACCGTACAGTTG	19
58	M Y Q A V A F L A M I V G T H T V S L	
111	CGGATCAGAGGGGTGCAGTCACTTGCCAGCTGTGCCCCGAGCAAGAGACAAGACCC	39
118	R I Q E C S H L P S C C P S K E Q E P	
31	CCGAGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCCCCCCAGAGCCTCTGAGCCAC	59
178	P E W L K W S A S V S P P E P L S H	
51	ACCCACACGAGATCTGCAGGGCCAGCAGGATGGCCCCCTCAACAGCAGGCGCATC	79
238	T H A E S C R A S K D G P L N S R A I	
71	TCTCTTGGAGCTATGATTGGACAGGACTTGAATCGGGTCCCCCAGGACCTGTACCAC	99
298	S P W S Y E L D R L N R V P Q D L Y H	
91	GCTCGATGCTGTGCCACACTGCGTCAGCTACAGCAGGTCCACATGGACCCGCTG	119
358	A R C L C P H C V S L Q T G S H M D P L	
111	GGCACTCCGTCCTTACCAACACAGACGGTCTTCTACGGGGCCATGCCATGGC	139
418	G N S V P L Y H N Q T V F Y R R P C H G	
131	GAGGAAGGTACCCATCGCGCTACTGCTTGGAGCGCAGGCTCTACCGAGTCTCCTTGGCT	159
478	E E G T H R R Y C L E R R L Y R V S L A	
160	TGTGTGTGTGCGGCCCGGGTCATGGCTTAGTCTACCACTGCTGAGGCTGA	170
538	C V C V R P R V M A *	
598	TGCCCGGTTGGAGAGAGGCGCGGTGTACAATCACTTGCAATCGGGCCGGGTCAA	
658	GCCTCAAGCCCTTACTGAAGCAGCAGGCTCCCGGACAGATGGAGGACTTGGGGAG	
	AAACTCTGACTTTTGGAGCACTTTTGGGAAGGAGCAGGTTCCGCTTGTGC	

Figure 2B

718 TGTAGAGGATCTGTGTGGCATTTCTACTCAGAACGGACTCCAAGGCTGCTGAC  
778 CTGGAAGCCATACTCCTGGCTCCTTTCCCTGAATCCCCAACTCCTGGCAGAGCACTT  
838 TCTCCACTCTCCCTTTGCTTTGCTTTGTTGTGTCATGCCAACTCTGCGTGC  
898 AGCCAGGTGTAATTGCTTTGAAGGATGTTCTGAGTGAAAGCTGTTATCGAAAGTCAAG  
958 AGATTTATCCAATAACAATCTGTGTTTAAAAAATAAAAAAAAAAAAAA<sup>1496</sup>

Map of Non-Secreted Form of Mouse IL-17 Like cDNA (SEQ ID NO:9), and  
Corresponding Amino Acid Sequence (SEQ ID NO:10)

1 CCGGGCAGGTGCCCTCGGCGTCCAAAGCTTAGGGAAGCTCCAGGTGCTTGGAAAT  
61 GAAGAAAAGGCCACGAGCAAAAAGGAACAGAGAAGGGAGGACAGTGTCTGGGCTC  
121 GCCTAGGTCGAGGGCATTATCACTACAATCAGAAATGGGAGTGCTATTTCTAGAGG  
181 TCTCCATCTTTGCCATTGCTGGTCTGCTCAGAAAAGTGTATGGGTGTGCCATTGCCA  
241 AGAACAGCTTCTGCTTACAGCAGGTGCTGACCTCTTTTCCAGAGGCACAGGGAAGAA  
301 TTCCAGCCCGGTGGCTGCCAGAGGCTTCTCTGGCGTTGGGTACAGAGCAGAGAAAG  
361 AAACCCCAATGTTCTCCTATGAAAACAATGTCCCGTCATCCAGGCCAGATCATTTCTGC  
421 AGTGTCAACAGTTGAGACAAGAAGCTGGGTCAATTTCTGTGCTAAGAGTGCCTGTCT  
481 GCACATGCCAAGGCTGTTGCATTTCTTGGAATGATCGTGGGAACCCACACCGTCAGTTG  
M I V G T H T V S L  
10  
541 CGGATCCAGGAGGCTGCAGTCACTTGCCAGCTGTGCCCCAGCAAGCAAGAACCC  
11 R I Q E G C S H L P S C C P S K E Q E P  
30



Figure 3A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L (SEQ ID NO:2),  
with a Known Human IL-17 Family Member Amino Acid Sequence, hIL-17  
(SEQ ID NO:5)

Smith-Waterman score: 155; 25.0% identity in 160 AA overlap

hIL-17L	10	20	30	40	50	60
	XNQDSXPAPVSL	LLPRGLSVSAPLVTECAVP	SMYQVVAFLAMV	MGTHTYSHW	SPSCFSGKQ	
hIL-17			: ::::  :  :  :  :  :  : :			
			MTPGKTSILVSL	LLLLLSLEAIVKAGITIP	RNPGCENSEDK	
			10	20	30	
hIL-17L	70	80	90	100	110	120
	DTSEELLRWSTVP	PPLEPARPNRHPESC	RASGDLNSRAIS	SPWRYELDRDLN	RLPQDL	
hIL-17	: : : :	:  :  :  :  :  :  :  : :	:  :  :  :  :  :  :  : :			
	NFPRTVMVNLNI	-----HNRNTNTNPK--	RSSD---	YYNRSTSPWNLHRNED	PERYP	SVI
	40	50	60	70	80	

Figure 3B

hIL-17L	130	140	150	160	170	180
	YHARCLPHCVSLQTGSHMDPLGNSVPLYHNQTVFYRRPCHGEGTHRRYCLERELYRYS					
	:::   :: :::     : ::  ::  :: : :					
hIL-17	90	100	110	120	130	140
	WEAKCRHLGCIN--ADGNVDYHMNSVPIQQEILVLRREPPHCPNS---FPLEKIL--VS					
hIL-17L	190					
	LACVCVRPRVMA					
	:::					
hIL-17	150					
	VGCTCVTPIVHHVA					

Figure 4

Pile-Up of Human IL-17 like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)  
with a Known Human IL-20 Amino Acid Sequence, hIL-20 (SEQ ID NO:6)

SCORES	Initl: 124	Initn: 124	Opt: 175	
Smith-Waterman score: 175;			36.7% identity in 90 aa overlap	
hIL-17L	70	80	90	100 110 120
	RWSTVPVPPLEPARPNRHPE	SCRASEDGPLNSRAIS	PWRVYELDRDLNRLPQDL	YHARCIC
hIL-20	70	80	90	100 110 120
	RNIEEMVAQLRNSSELAQR	KCEVNLQLWMSNKRSL	SPWGYISINHDPSRIPVDL	PEARCLC
hIL-17L	130	140	150	160 170 180
	PHCVSLQTGSHMDPLGNS	VPLYHNQTVFYRRPCHG	EGETHRRYCLERRLYRVSIA	-CVCV
hIL-20	130	140	150	160 170 180
	LGCVPFTMQE-DRSMVSV	VPVF-SQVPVRRLLCPP	PPPTG--CRQRAYMETIVAG	CTCI
hIL-17L	190			
	RPRVMA			
hIL-20	F			

Figure 5

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)  
with a Known Human IL-17 Amino Acid Sequence, hIL-17b (SEQ ID NO:7)

Family Member

SCORES Initl: 124 Initn: 124 Opt: 178  
Smith-Waterman score: 178; 35.6% identity in 90 aa overlap

hIL-17L	70	80	90	100	110	120
	RWSTVP	PPLEPARPNRHPES	CRASED	GPLNSRAIS	PKWYELDRDLNRLPQDLYHARCLC	
hIL-17b	70	80	90	100	110	120
	RNIEMVAQLRNSSELAQRKCEVNLQLMMSNKRSLSPWGYSINHDPSRIPVDLPEARCLC					
hIL-17L	130	140	150	160	170	180
	PHCVSLQTGSHMDPLGNSVPLYHNNQTVFYRRPCHGEETHRRYCLERRLYR-VSLACVCV					
hIL-17b	130	140	150	160	170	180
	LGCNPF	TMQE-DRSMVSVVF-SQVPVRRRLCP	PPPTGP--CRQRAVNETI	AVGCTCI		
hIL-17L	190					
	RPRVMA					
hIL-17b	180					
	F					



Figure 6A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)  
with Amino Acid Sequence of a Known Human IL-17 Family Member,  
hIL-17c (SEQ ID NO:8)

SCORES      Initl: 149      Initn: 194      Opt: 236

Smith-Waterman score: 243;    34.5% identity in 171 aa overlap

hIL-17L	20	30	40	50	60	69
	GLSVSAPLVTECAVPSMYQVVAFLAMVMGTHITYSHW-PSCCPSK----					QQDTSEELLR--
	: :					:
	MTLLPGLLFILTWLHTCLAHHDPSLRGPHPHSGT	10	20	30	40	50
hIL-17c						
	70	80	90	100	110	
hIL-17L	-WS-TVVPV----	PLEPARP-NRH--	PES----	C----	RASE--	DGFLNSRAISPWRYELDRD
	: :				:	:
	KWQALPVALVSSLEAAASHRGHERP	SATTQC	PLRPEE	VLEAD	THQRSIS	PWRYRVDTD
hIL-17c	60	70	80	90	100	110

Figure 6B

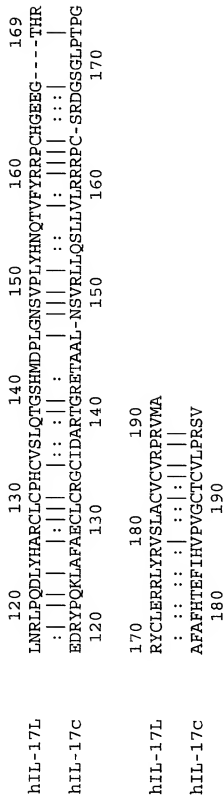


Figure 7

# Northern Blot Expression Analysis of TH00-018 Necropsied Transgenic Founders

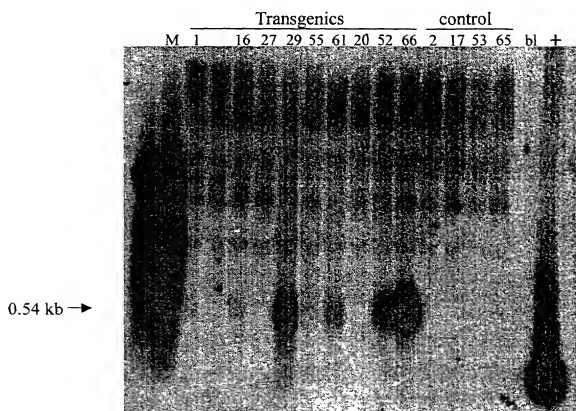


Figure 8

Northern Blot Expression Analysis of TH00-018  
Hepatectomized Transgenic Founders

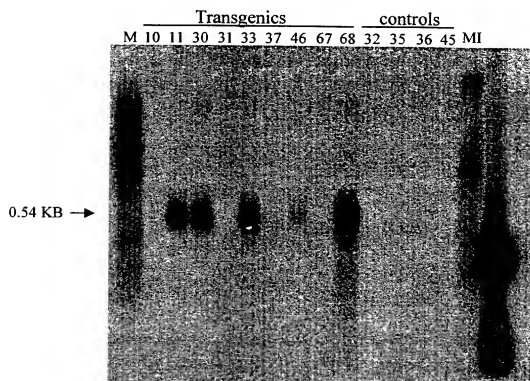


Figure 9

# Non-Transgenics

# IL-17E Transgenics

A



Lymph Node H&E 2x

B



C



Lymph Node B220 2x

D

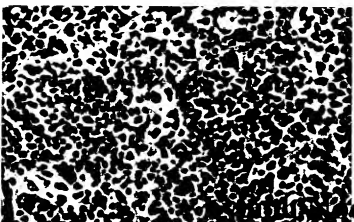
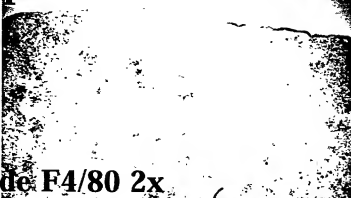


E



Lymph Node F4/80 2x

F



Lymph Node H&E 40x

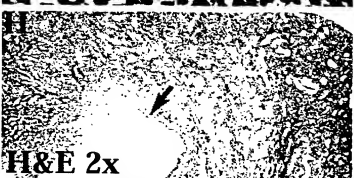
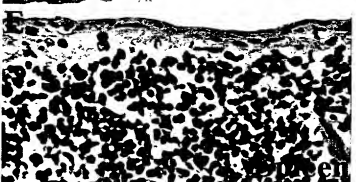
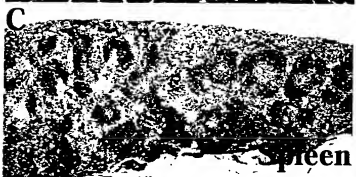
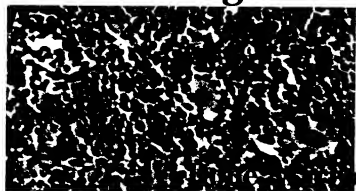


10037591.122101

Figure 10

# Non-Transgenics

# IL-17E Transgenics



10037591.122101

Figure 11

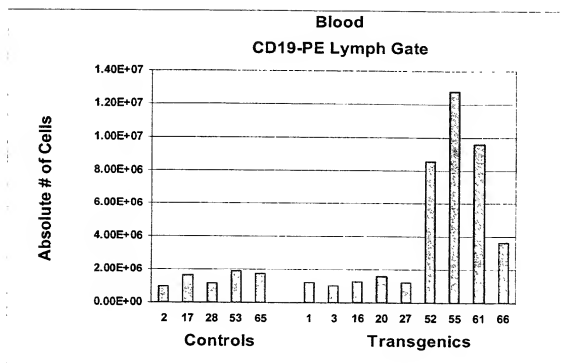


Figure 12

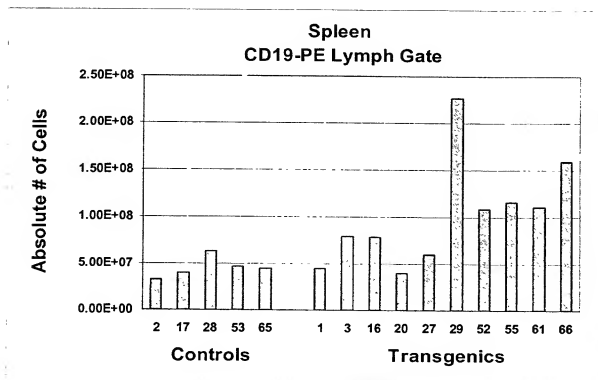




Figure 13

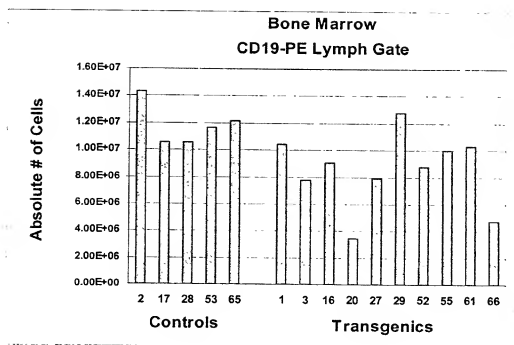


Figure 14

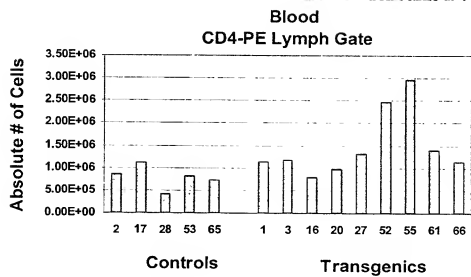


Figure 15

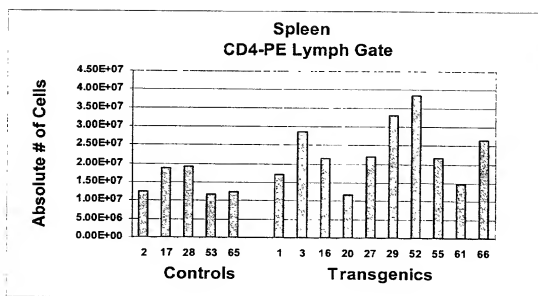


Figure 16

CD45R+ CELLS EXPRESSING IL17Br IN  
TRANSGENIC BONE MARROW

10037551.1.1652001

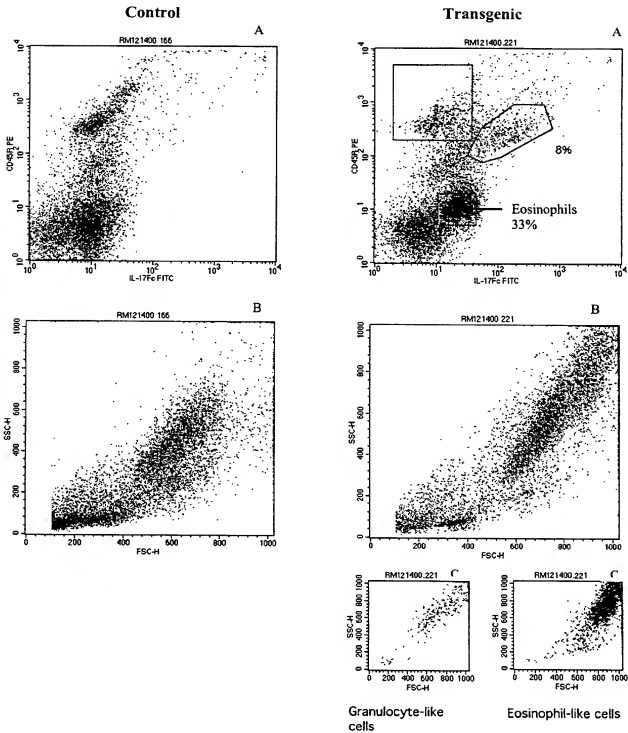


Figure 17

# CD4+ CELLS EXPRESSING IL17Br IN TRANSGENIC BONE MARROW

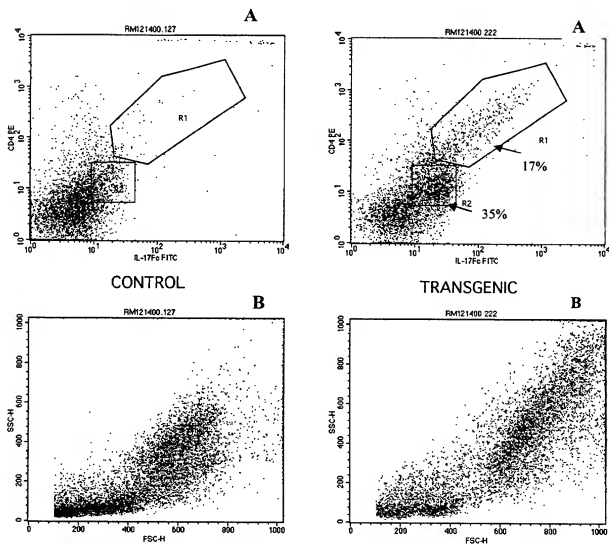


Figure 18

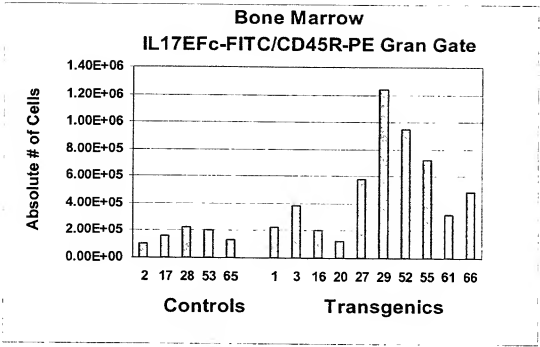


Figure 19

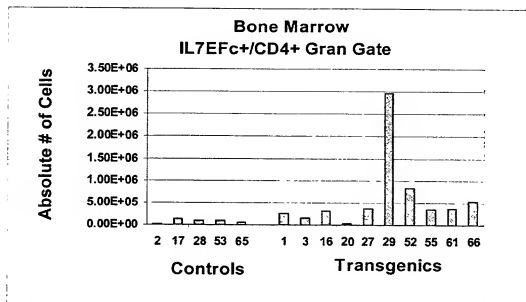
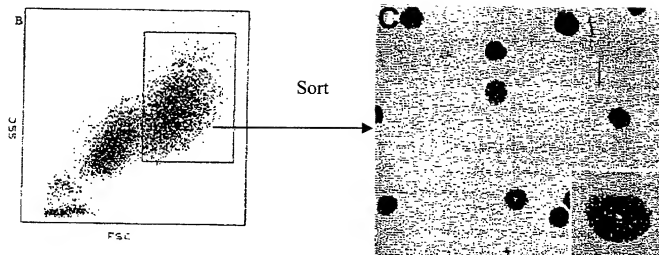


Figure 20



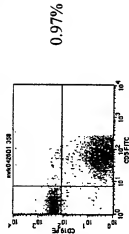
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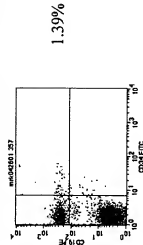
Figure 21A

# Non-transgenic Control

CD5+ on CD19+ Lymphocytes in Lymph Node



CD34+ on CD19+ Lymphocytes in Lymph Node



# Transgenic

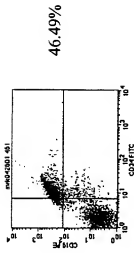
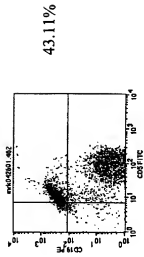


Figure 21B

CD4 Expression on Eosinophils in Bone Marrow

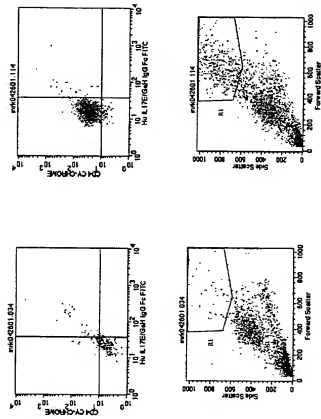


Figure 22

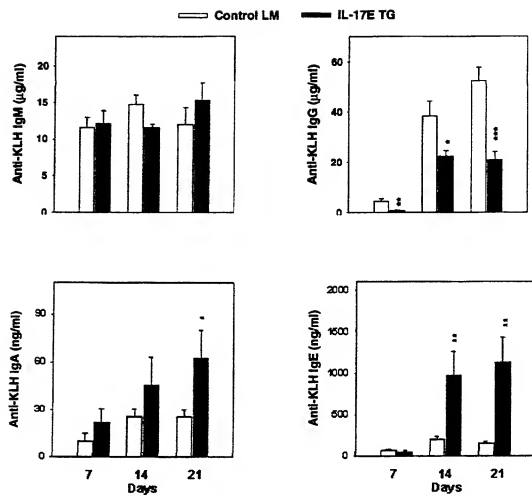


Figure 23

10037501 12101

